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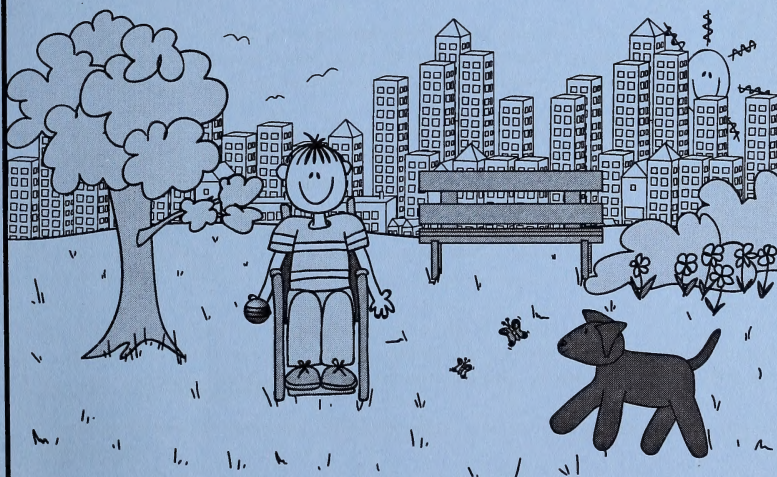


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## GRADE THREE MATHEMATICS: MODULE 2

# NUMBERS COUNT

Home Instructor's Guide: Days 10-18  
and  
Assignment Booklet 2B





Grade Three Mathematics  
 Module 2: Numbers Count  
 Home Instructor's Guide: Days 10–18 and Assignment Booklet 2B  
 Learning Technologies Branch  
 ISBN 0-7741-2305-2

This document is intended for	
Students	✓
Teachers	✓
Administrators	
Home Instructors	✓
General Public	
Other	



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## DAILY SUMMARY

**DAY 10:** Different ways to represent a number are explored today. Your student uses different-sized groups to build a number. Today's activities are designed to help your student understand that large numbers can be expressed in many different ways. The activities illustrate the relationship between numbers—how larger numbers can be broken into smaller groups. Patterns are again examined to help the student predict how many small groups it would take to make a larger number.

A mental math strategy is introduced to help the student add large groups. When adding numbers that end in zero(s), the student can ignore the zeros at first and then add them onto the answer. This is often called “dropping the zero.”

### DAY 10: LESSON 1

#### Answers

1. a. It will take 3 bundles.
- b.  $50 + 50 + 50 = 150$
- c. Luke would need 3 packages of balloons.

2.

Number	How Many 50s?	Number Sentence
100	2	$50 + 50 = 100$
200	4	$50 + 50 + 50 + 50 = 200$
300	6	$50 + 50 + 50 + 50 + 50 + 50 = 300$
400	8	$50 + 50 + 50 + 50 + 50 + 50 + 50 + 50 = 400$
500	10	$50 + 50 + 50 + 50 + 50 + 50 + 50 + 50 + 50 + 50 = 500$
600	12	$50 + 50 + 50 + 50 + 50 + 50 + 50 + 50 + 50 + 50 + 50 + 50 = 600$

3. The number of 50s increases by 2 each time.

### DAY 10: LESSON 2

#### Answers

1. There are 4 fives in 20.



2. a.

Number	How Many 5s?
20	4
40	8
60	12
80	16
100	20
120	24
140	28

b. The number of 5s increases by 4 each time.

c. 160: **32**  
 800: **40**  
 300: **60**

3. a.

Number	How Many 25s?
50	2
100	4
150	6
200	8
250	10
300	12
350	14

b. The number of 25s increases by 2 each time.

c. 400: **16**  
 500: **20**

**DAY 10: LESSON 3****Answers**

1. The student has to find out how many bags of paper plates would be needed.
2. The student could solve the problem by using base ten blocks, by making groups with the centimetre grid paper, or by referring to the chart in Lesson 1 of today's activities.
3. Luke's family will need 4 bags of plates.
4. The student should indicate if the answer makes sense.
5. a. 90                      b. 70                      c. 80  
d. 900                      e. 70                      f. 700

**DAY 11:** Target games are used to show more ways of “building” a large number from smaller groups. Problems that involve many possible answers are discussed in this lesson. This is a good time to reinforce the fact that there are many ways to find an answer to a problem. You will be timing the student for an addition facts exercise today. Be sure the student completes the Addition Facts Graph for Day 11.

**DAY 11: LESSON 1****Answers**

1. and 4. There are many different combinations including  $500 + 500$ ,  $100 + 100 + 300 + 500$ ,  $300 + 200 + 500$ ,  $300 + 300 + 300 + 100$ ,  $200 + 200 + 200 + 400$ , and so on. Add the student's combinations to be sure they equal 1000.

**DAY 11: LESSON 2****Answers**

1. to 4. There are many combinations. Here are a few:

- 2 boxes of Vanilla Frosts:  $100 + 100 = 200$
- 1 box of Vanilla Frosts and 2 boxes of Bob's Ice Cones:  $100 + 50 + 50 = 200$
- 4 boxes of Bob's Ice Cones:  $50 + 50 + 50 + 50 = 200$
- 5 boxes of Fruit Freezies and 4 boxes of Julie's Ice-Cream Bars:  
 $20 + 20 + 20 + 20 + 20 + 25 + 25 + 25 + 25 = 200$

Add the student's combinations to be sure they equal 200.



**Timed Exercise Answers:**

$4 + 9 = 13 \quad 5 + 8 = 13 \quad 8 + 4 = 12 \quad 3 + 7 = 10$

$7 + 8 = 15 \quad 5 + 5 = 10 \quad 6 + 4 = 10 \quad 5 + 7 = 12$

$6 + 8 = 14 \quad 9 + 5 = 14 \quad 3 + 6 = 9 \quad 8 + 9 = 17$

$$\begin{array}{r} 6 \\ + 5 \\ \hline 11 \end{array}$$

$$\begin{array}{r} 8 \\ + 8 \\ \hline 16 \end{array}$$

$$\begin{array}{r} 7 \\ + 2 \\ \hline 9 \end{array}$$

$$\begin{array}{r} 3 \\ + 8 \\ \hline 11 \end{array}$$

$$\begin{array}{r} 6 \\ + 6 \\ \hline 12 \end{array}$$

$$\begin{array}{r} 7 \\ + 4 \\ \hline 11 \end{array}$$

$$\begin{array}{r} 9 \\ + 7 \\ \hline 16 \end{array}$$

$$\begin{array}{r} 8 \\ + 6 \\ \hline 14 \end{array}$$

**DAY 12:** Rounding numbers to the nearest ten is first reviewed. The student is introduced to rounding to the nearest hundred. Guidelines for rounding numbers are discussed. These strategies are useful when the student wants to verify an answer to a calculation or problem. Later in the year, other ways of rounding will be discussed.

**DAY 12: LESSON 1****Answers**

1. The 8 in the ones place is more than 5.
2. 700
3. a. 260                      b. 870                      c. 620  
d. 900                      e. 110                      f. 700

**DAY 12: LESSON 2****Answers**

1. 4
2. 400
3. a. 600                      b. 200                      c. 400  
d. 900                      e. 1000                      f. 700

**DAY 13:** Problem-solving skills are emphasised in today's lesson. As the student works through the problem-solving steps, the strategies "making an organized list" and "acting it out" are used.

In Assignment Booklet 2B, the student is encouraged to choose his or her own strategy and solve several problems. Allow the student to work through the strategy they have chosen, even if you don't think it will work. Trial and error can help the student select the best method. If necessary, suggest alternate strategies for the student and have him or her choose the one he or she thinks will work. Encourage perseverance, and have the student try another strategy if the first one doesn't work.

## DAY 13: LESSON 1

### Answers

1. a. The student must find out which number could be the winning ticket.
- b. The student could solve the problem by listing the tickets and eliminating the numbers that could not be winners. The student could read the numbers and go through each number on the list to see if it met the criteria for the winning number. Your student may have other ways to solve the problem.
- c. 637
- d. The ticket number 637 could be the winning ticket.
- e. The student should indicate if the answer solves the problem and seems reasonable.
2. a. 677
- b. Yes, one of the children did have the winning ticket. The winning ticket is 677.
3. a. The student has to find combinations using two groups that equal 600.
- b. The student may act out the problem using base ten blocks or use repeated addition. Your student may have other suggestions for solving the problem.
- c. There are many possible combinations, such as  $300 + 300 = 600$ ,  $100 + 500 = 600$ ,  $250 + 350 = 600$ , and  $50 + 550 = 600$ . Be sure that the combinations equal 600.
- d. There are many possible combinations. The total should equal 600 in each case.

**300** kilograms and **300** kilograms of hay

**100** kilograms and **500** kilograms of hay

**250** kilograms and **350** kilograms of hay



- e. The student should indicate if the answer solves the problem and is reasonable.
4. There are many possible combinations. The total should equal 900 in each case.

**300 kilograms, 300 kilograms, and 300 kilograms of hay**

**200 kilograms, 400 kilograms, and 300 kilograms of hay**

**600 kilograms, 100 kilograms, and 200 kilograms of hay**

**DAY 14:** Fair shares and equal parts are used to help the student learn about fractions. The fractions halves, thirds, and fourths are reviewed. The student is introduced to the words *numerator* and *denominator*. An Extension Activity allows students to use fractions in a practical way as a recipe is followed. You may wish to substitute any favourite recipe that includes fractional measurements.

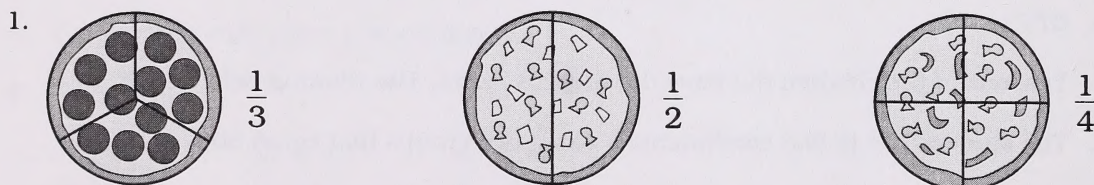
### DAY 14: LESSON 1

#### Answers

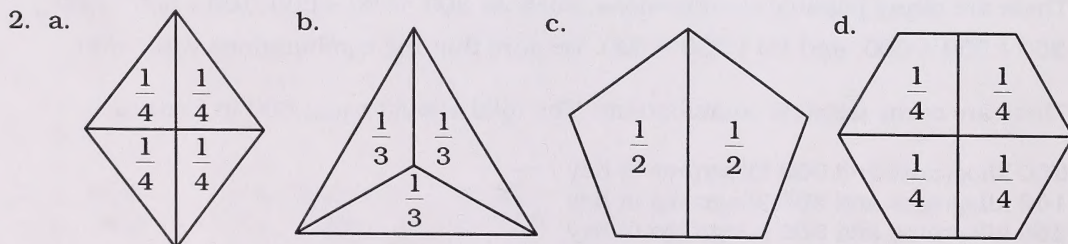
1. no
2. a. no                      b. yes.                      c. no  
d. yes                      e. yes                      f. no

### DAY 14: LESSON 2

#### Answers



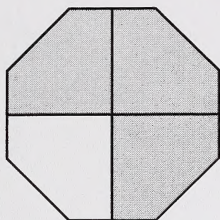
Fractions for the family pizza will vary depending on the number of family members.



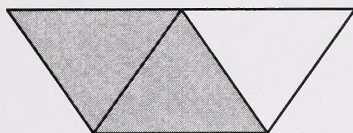


**DAY 14: LESSON 3****Answers**

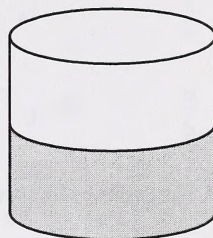
1.



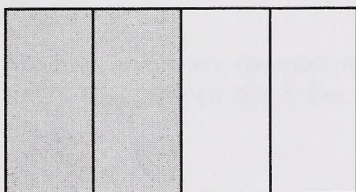
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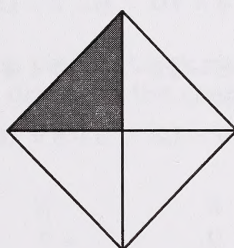
3.



4.



5.



**DAY 15:** Interlocking cubes and shaded pictures are used to help the student understand that parts of a set can also be expressed as a fraction.

Addition number facts are also practised in this lesson. Take some time to compare the results on this exercise to some of the student's earlier number facts pages. How much improvement do you see? Is your student completing the 20 facts in 2 minutes with reasonable accuracy? On the Alberta Learning Achievement Test, students are expected to complete 35 addition questions in 2 minutes.

Do you and your student need to spend extra time practising addition facts? Discuss the strategies the student uses most often. If necessary, review the strategies discussed in the first part of Module 1. Prepare flash cards or other games and spend a few minutes each day working on addition problems the student is having difficulty with. In Module 3, the student will start practising subtraction facts but should continue to work on addition if there is a need.

**DAY 15: LESSON 1****Answers**

1. a. 4

b. 3

c.  $\frac{3}{4}$ 

d. 1

e.  $\frac{1}{4}$



2. a. 2                      b.  $\frac{2}{3}$                       c. 1                      d.  $\frac{1}{3}$

3. a.  $\frac{1}{2}$                       b.  $\frac{1}{2}$

4. a.  $\frac{3}{4}$                       b.  $\frac{2}{3}$                       c.  $\frac{2}{4}$  or  $\frac{1}{2}$

**Timed Exercise Answers:**

$4 + 7 = 11$      $5 + 8 = 13$      $6 + 4 = 10$      $6 + 7 = 13$

$9 + 8 = 17$      $5 + 7 = 12$      $6 + 6 = 12$      $5 + 4 = 9$

$3 + 8 = 11$      $5 + 5 = 10$      $3 + 9 = 12$      $8 + 8 = 16$

$\begin{array}{r} 7 \\ + 5 \\ \hline 12 \end{array}$	$\begin{array}{r} 8 \\ + 4 \\ \hline 12 \end{array}$	$\begin{array}{r} 9 \\ + 2 \\ \hline 11 \end{array}$	$\begin{array}{r} 3 \\ + 7 \\ \hline 10 \end{array}$
--	--	--	--

$\begin{array}{r} 5 \\ + 6 \\ \hline 11 \end{array}$	$\begin{array}{r} 9 \\ + 4 \\ \hline 13 \end{array}$	$\begin{array}{r} 7 \\ + 7 \\ \hline 14 \end{array}$	$\begin{array}{r} 9 \\ + 6 \\ \hline 15 \end{array}$
--	--	--	--

**DAY 16:** The student learns more about fractions using pattern blocks and paper-folding activities. Your student uses pattern blocks to determine how many units will cover a printed shape. You may need to assist your student with some of the paper folding. As you assist, discuss how the fractions relate to each other and how this knowledge can be used to make new folds.

Strips from the paper-folding activity are used to help the student understand the comparative sizes of fractions. In real-life situations, try to help the student compare portions of food. For example, if one pie is cut into thirds and another in a same-size pan is cut into sixths, which piece is larger? How many sixths are the same size as a third? Real-life experiences can help students visualize fractions and understand more clearly how they relate to whole numbers.

Check the websites at the end of the lesson for some interactive fraction activities. The more varied your student's experiences with fractions, the more likely they will form a good basic understanding of numbers that are less than one.



**DAY 16: LESSON 1****Answers**

1.  $\frac{1}{10}$
2.  $\frac{1}{8}$
3.  $\frac{1}{9}$
4. Answers may vary depending upon which pattern block was used to cover the shape. The individual pattern block lines should be drawn on the shapes.
  - a.  $\frac{1}{4}$
  - b.  $\frac{1}{3}$
  - c.  $\frac{1}{4}$  when triangles are used
  - d.  $\frac{1}{3}$  if hexagons are used,  $\frac{1}{18}$  if triangles are used,  $\frac{1}{6}$  if trapezoids are used,  $\frac{1}{9}$  if diamonds are used
5. a.  $\frac{2}{6}$       b.  $\frac{1}{5}$       c.  $\frac{2}{7}$   
 d.  $\frac{3}{10}$       e.  $\frac{3}{5}$       f.  $\frac{5}{6}$

**DAY 16: LESSON 2****Answers**

1. The following fractions should be circled.
  - a.  $\frac{1}{2}$       b.  $\frac{1}{6}$       c.  $\frac{1}{4}$       d.  $\frac{1}{3}$
2. If you fold the strip in half, and then in half two more times, you can make eighths.



3.  $\frac{2}{4}$

4.  $\frac{3}{6}$

5. a. 4

b.  $\frac{1}{4}$

c. The student should notice that his or her fourths are larger than the home instructor's fourths.

6. Student estimates may vary. Many will realize there should be eight parts.

7.  $\frac{1}{8}$

8. The student should notice that his or her eighths are larger than the home instructor's eighths.

**DAY 17:** The problem-solving steps are applied to several word problems involving fractions. The student is taught how to draw a diagram or picture to help solve a problem. The student is encouraged to follow the problem-solving steps mentally and to choose strategies independently.

## DAY 17: LESSON 1

### Answers

1. a. The student has to find out how many sweaters are black.  
b. 4  
c. There are 4 black sweaters.  
d. The student should indicate if the sentence answers the question and makes sense.
2. a. The student has to find out how much of the ice-cream sandwiches each person would get if they share them fairly.  
  
b.  $\frac{2}{3}$   
  
c. Each person will get  $\frac{2}{3}$  of an ice-cream sandwich.



- d. The student should indicate if the sentence answers the question and makes sense.
- 3. a. The student may draw a diagram showing 2 of the 8 jeans black, and 3 of the 8 jeans tan. The student may use another strategy, such as adding  $2 + 3$ , then subtracting from 8.
- b. Three pairs of jeans are blue.

**DAY 17: LESSON 2****Answers**

- 1. There are  $\frac{2}{5}$  of the happy faces coloured.
- 2. Each person would get  $\frac{3}{4}$  of a pizza.
- 3. Luke would probably choose the Choco Chews bar because  $\frac{1}{2}$  of it would be a larger portion than  $\frac{1}{2}$  of the other bar.
- 4. Luke has 4 more plates to wash.

**DAY 18:** The concepts that were introduced in this module are reviewed in the Assignment Booklets. Some multiple-choice questions are included to familiarize the student with this style of questioning. If your student experiences any difficulty with the review questions, encourage him or her to review the pertinent section in the Student Module Booklet.

After the student has completed today's activities and assignments, have the student complete the Student's Checklist and Student's Comments. Complete the Home Instructor's Checklist and Home Instructor's Comments. Submit Assignment Booklet 2B to the teacher.





## ASSIGNMENT BOOKLET 2B

Grade Three Mathematics  
Module 2: Days 10–18

Home Instructor's Comments and Questions

\_\_\_\_\_  
Home Instructor's Signature

**FOR HOME INSTRUCTOR USE**  
(if label is missing or incorrect)

Student File Number:

Date Submitted:

Apply Module Label Here

Name

Address

Postal Code

*Please verify that preprinted label is for  
correct course and module.*

**FOR SCHOOL USE ONLY**

Assigned Teacher:

Date Assignment Received:

Grading:

Additional Information:

Teacher's Comments

\_\_\_\_\_  
Teacher's Signature

**Home Instructor: Keep this sheet when it is returned to you as a record of the student's progress.**

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- Are all the assignments completed? If not, explain why.
- Has your work been reread to be sure the spelling and details are correct?
- Is the record form filled out and the correct module label attached?

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**GRADE THREE MATHEMATICS: MODULE 2**

# **NUMBERS COUNT**

## **Assignment Booklet 2B**



**Learning  
Technologies  
Branch**

**Alberta**  
LEARNING

Grade Three Mathematics  
Module 2: Numbers Count  
Assignment Booklet 2B  
Learning Technologies Branch

This document is intended for	
Students	✓
Teachers	✓
Administrators	
Home Instructors	✓
General Public	
Other	



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1. Use centimetre grid paper from the Appendix of your Student Module Booklet to make groups of 20. Use those groups to complete the chart.

Number	How Many 20s?
40	
60	
80	
100	
120	
140	

2. What pattern do you see? \_\_\_\_\_
- \_\_\_\_\_

3. Predict how many 20s are in the following numbers.

a. 160 \_\_\_\_\_

b. 200 \_\_\_\_\_

c. 300 \_\_\_\_\_

4. Make bundles of 50 using your tens rods.

Complete the chart. The first one is done as an example.

Number	How Many 50s?	Number Sentence
150	3	$50 + 50 + 50 = 150$
250		
350		
450		

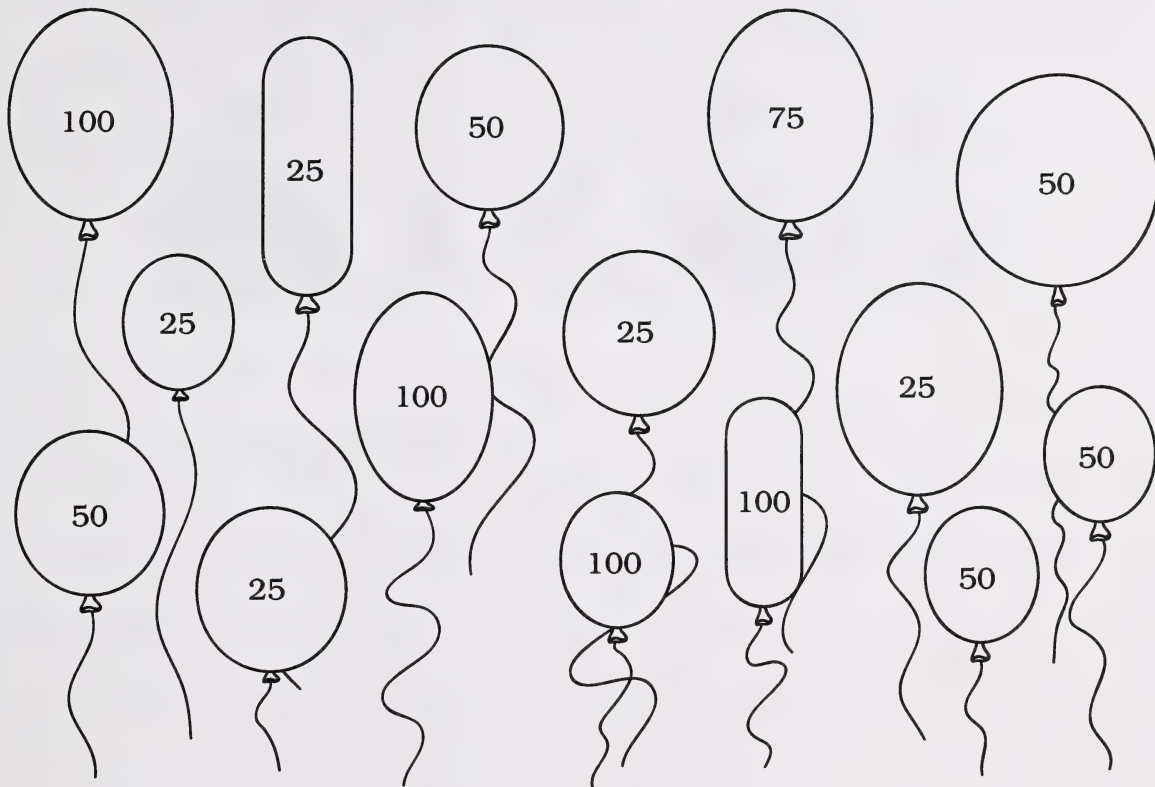
5. Use the chart above to solve the following problem.

Luke's family was asked to bring 350 hamburgers for the reunion. The hamburgers came in packages of 50. How many packages will they need?

Luke's family will need \_\_\_\_\_ packages of hamburgers.



1. Look at the balloon game below.



Draw an **x** on the balloons you would pop to get a score of 500.

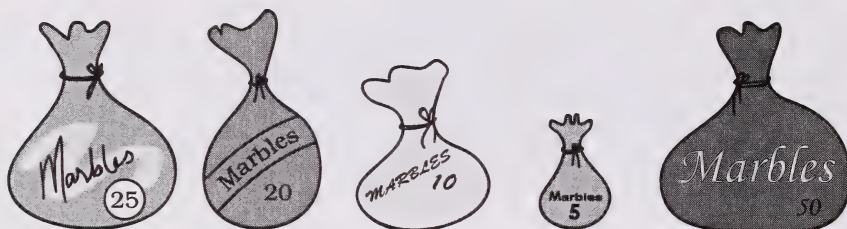
Write a number sentence to show how you got the score.

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2. You need 100 marbles for your game. The marbles come in bags of different sizes. How many bags of each size could you buy to make 100 marbles? Find three ways to make 100 marbles. Write a number sentence for each way.



- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_



1. Round each number to the nearest ten.

- a. 657 \_\_\_\_\_ b. 432 \_\_\_\_\_ c. 95 \_\_\_\_\_  
d. 898 \_\_\_\_\_ e. 502 \_\_\_\_\_ f. 121 \_\_\_\_\_

2. Round each number to the nearest hundred.

- a. 529 \_\_\_\_\_ b. 276 \_\_\_\_\_ c. 350 \_\_\_\_\_  
d. 481 \_\_\_\_\_ e. 957 \_\_\_\_\_ f. 404 \_\_\_\_\_

3. Journal Entry

When would you use rounding?

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1. Sarah was reading a poster about the history of the zoo. It listed the number of animals that the zoo housed each year since it opened. The chart looked like this.

### Number of Animals in the Zoo

Year	Number of Animals
1996	238
1997	229
1998	345
1999	300
2000	376

- a. Put the number of animals in order from least number to the greatest number.

\_\_\_\_\_

least number

\_\_\_\_\_

greatest number

- b. In which year did the zoo have the least number of animals? \_\_\_\_\_
- c. In which year did the zoo have the greatest number of animals? \_\_\_\_\_
- d. In 1999, the 300 animals in the zoo were mammals, reptiles, and amphibians. There were more mammals than reptiles or amphibians. Write four possible combinations of animals that would total 300.

\_\_\_\_\_ mammals, \_\_\_\_\_ reptiles, and \_\_\_\_\_ amphibians

\_\_\_\_\_ mammals, \_\_\_\_\_ reptiles, and \_\_\_\_\_ amphibians

\_\_\_\_\_ mammals, \_\_\_\_\_ reptiles, and \_\_\_\_\_ amphibians

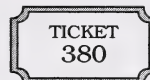
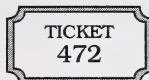
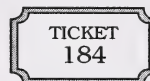
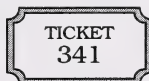
\_\_\_\_\_ mammals, \_\_\_\_\_ reptiles, and \_\_\_\_\_ amphibians



2. When Sarah's class returned to the classroom, they made up number riddles about winning tickets. Circle the possible winning ticket in each group.

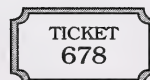
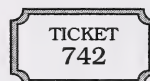
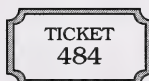
a. The winning number is

- greater than 200
- less than 400
- an even number



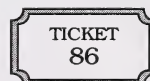
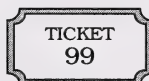
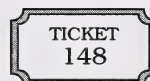
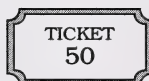
b. The winning number is

- greater than 500
- less than 800
- an odd number



c. The winning number is

- greater than 50
- less than 100
- an even number



d. Make up your own winning-number riddle for the teacher. Draw four possible tickets. Make sure that only one could be the winning number.

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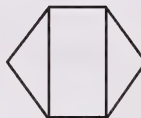
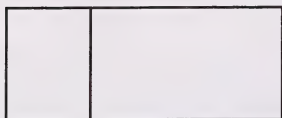


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1. Circle the shapes that are divided into fractions.

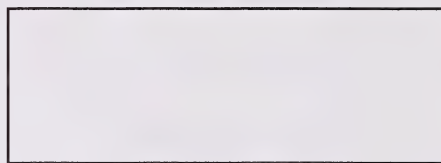


2. Draw lines to divide each shape. Write the fraction on each part.

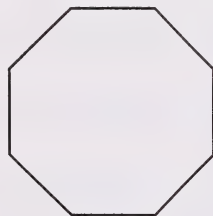
a. Divide into two equal parts.



b. Divide into three equal parts.



c. Divide into four equal parts.

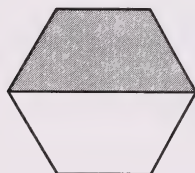


d. Divide into four equal parts.



3. Write a fraction to tell how much of each shape is shaded.

a.



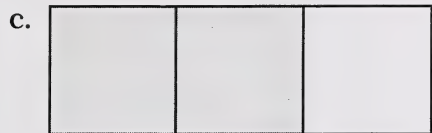
\_\_\_\_\_

b.

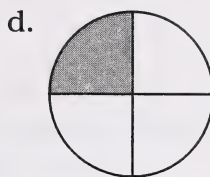


\_\_\_\_\_



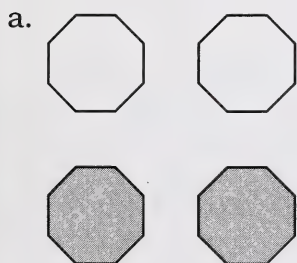


\_\_\_\_\_

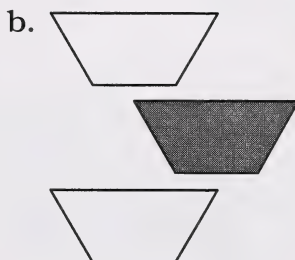


\_\_\_\_\_

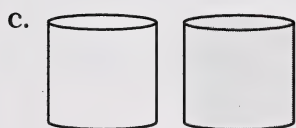
4. Write a fraction to tell how much of each set is shaded.



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_

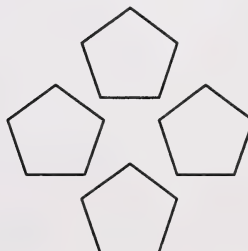


\_\_\_\_\_

5. a. Colour  $\frac{2}{3}$  of the set.



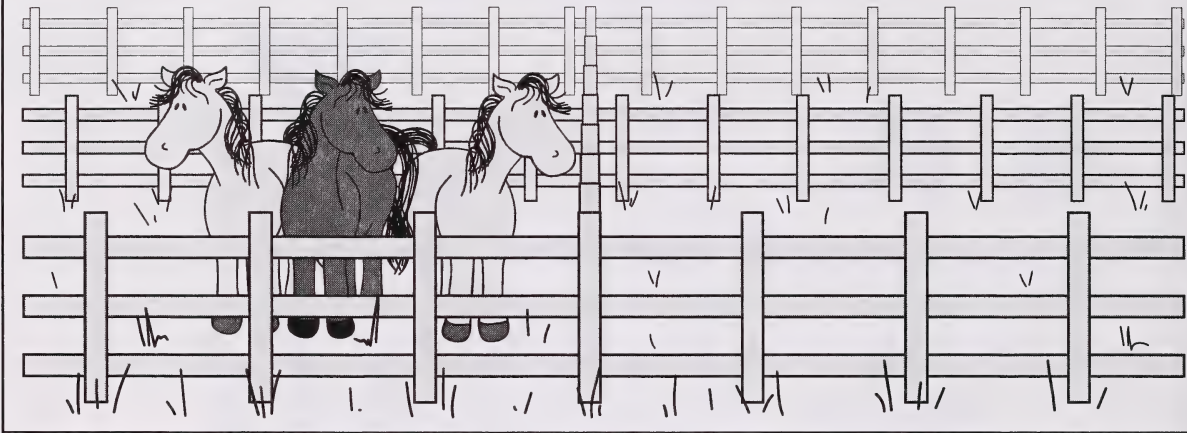
b. Colour  $\frac{1}{4}$  of the set.



## 6. Journal Entry

Make up a short story that uses fractions to describe something. Remember that fractions can tell about parts of a whole or parts of a set. Read the example below. Then think of a different situation, and write and draw about it.

On Sarah's farm there are 3 horses. Of them,  $\frac{2}{3}$  are white and  $\frac{1}{3}$  are black. The horses live in a pasture that is divided into four equal parts. Each part is  $\frac{1}{4}$  of the total pasture.



Now, it's your turn to tell your story.

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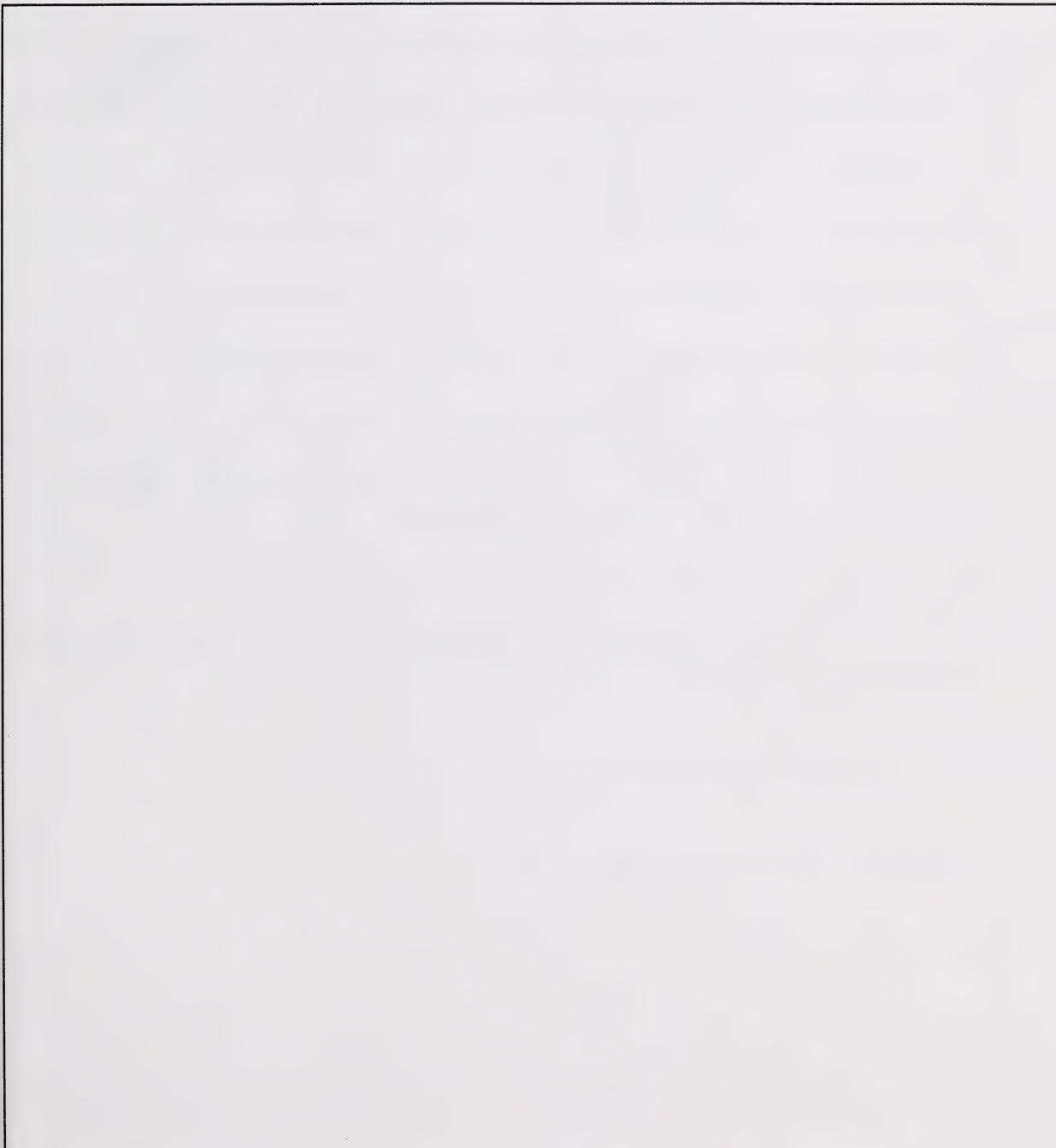
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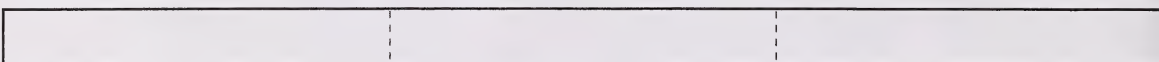
Draw a picture about your story.

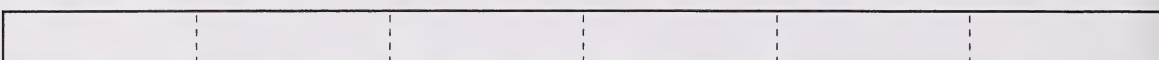
A large, empty rectangular box with a thin black border, intended for a student to draw a picture related to their story.

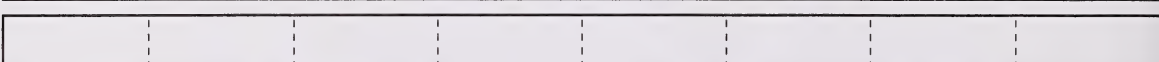
1. These paper strips were folded and then unfolded. Write a fraction to name each part.

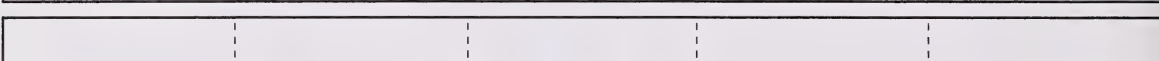
a. 

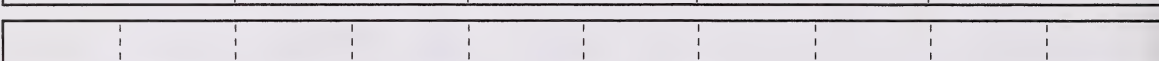
b. 

c. 

d. 

e. 

f. 

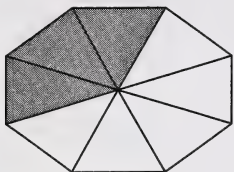
g. 

2. Compare the strips above to answer the questions.

- a. Which is larger  $\frac{1}{4}$  or  $\frac{1}{6}$ ? \_\_\_\_\_
- b. Which is smaller  $\frac{1}{8}$  or  $\frac{1}{10}$ ? \_\_\_\_\_
- c. How many sixths are the same as  $\frac{1}{3}$ ? \_\_\_\_\_
- d. How many tenths are the same as  $\frac{1}{2}$ ? \_\_\_\_\_

3. Write a fraction to tell how much of each shape or set is shaded.

a.



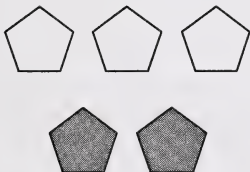
\_\_\_\_\_

b.



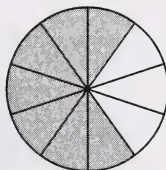
\_\_\_\_\_

c.



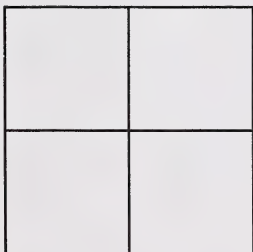
\_\_\_\_\_

d.



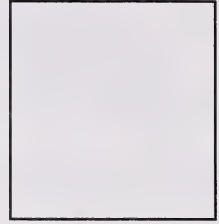
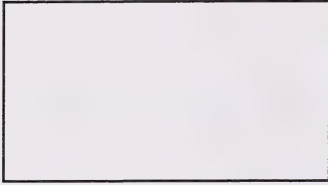
\_\_\_\_\_

4. This square is divided into fourths. Draw lines to show eighths.





5. Divide each shape into quarters. Circle the shape with the largest quarters.



6.



What fraction of all the animals are the following?

a. horses: \_\_\_\_\_

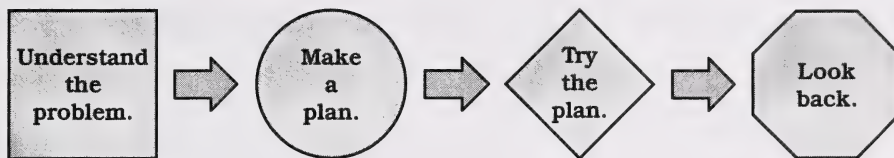
b. cows: \_\_\_\_\_

c. sheep: \_\_\_\_\_

d. chickens: \_\_\_\_\_

e. four legged: \_\_\_\_\_

f. white: \_\_\_\_\_



Use the problem-solving steps and your favourite strategies to solve each problem. Show your work. Write the answer in a sentence.

1. Suppose you want a large slice of pizza. Should you choose  $\frac{1}{8}$  of the pizza or  $\frac{1}{3}$  of the pizza? Why?

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2. There are 10 stuffed toy animals on a shelf. Of them,  $\frac{3}{10}$  are dogs,  $\frac{2}{10}$  are cats, and  $\frac{1}{10}$  are tigers. The rest are bears. How many of the stuffed toys are bears?

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3. There are 2 pies. If the pies are shared equally among 5 people, how much will each person get?

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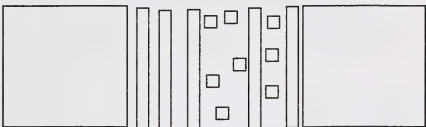
1. Write the numbers that come next.

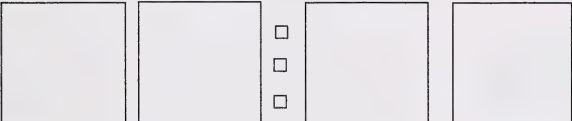
a. 578    579    \_\_\_\_\_

b. 321    322    \_\_\_\_\_

c. 996    997    \_\_\_\_\_

2. Write each number.

a.  \_\_\_\_\_

b.  \_\_\_\_\_

c.  \_\_\_\_\_

d. 9 hundreds, 3 tens, and 7 ones \_\_\_\_\_

e. 5 hundreds and 8 ones \_\_\_\_\_

f. 3 hundreds and 6 tens \_\_\_\_\_

3. What is the value of 8 in the number 983? \_\_\_\_\_

4. Solve the number riddles.

- a. My digits are 6, 3, and 8.

I am a number greater than 800.

My tens digit is 6.

What number am I?

\_\_\_\_\_

- b. My digits are 4, 0, and 1.

My ones digit is 4.

I am a number less than 140.

What number am I?

\_\_\_\_\_

- c. I am greater than 352 and less than 370.

My tens digit is an even number.

My ones digit is 4.

\_\_\_\_\_

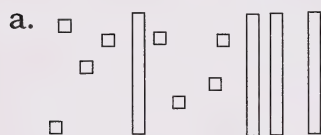
- d. My digits are 7, 3, and 6.

My hundreds digit is an even number.

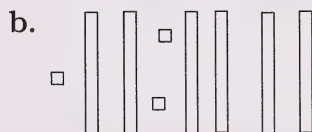
My ones digit is less than my tens digit.

\_\_\_\_\_

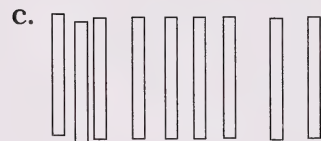
5. Count the blocks and write each number in words.



\_\_\_\_\_

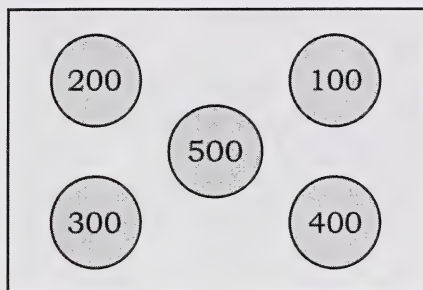


\_\_\_\_\_



\_\_\_\_\_

6. You want to reach a score of 1000 on the target below. Write number sentences to show three ways to reach 1000.



Top View

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7. Round each number to the nearest ten.

a. 437 \_\_\_\_\_

b. 698 \_\_\_\_\_

c. 109 \_\_\_\_\_

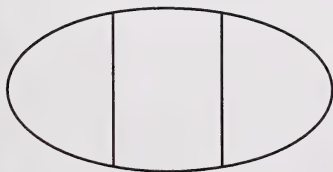
8. Round each number to the nearest hundred.

a. 357 \_\_\_\_\_

b. 621 \_\_\_\_\_

c. 79 \_\_\_\_\_

9. Is the shape below divided into fractions? Explain.



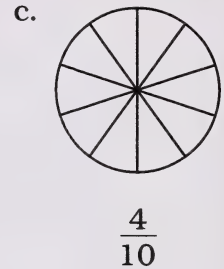
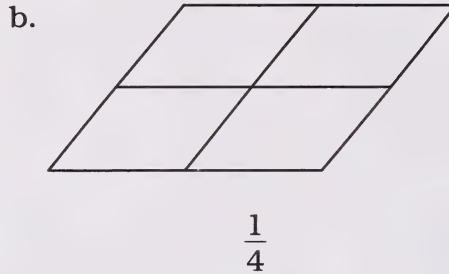
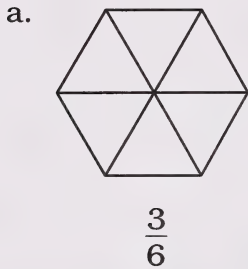

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10. Shade each figure to show the fraction.



11. Write a fraction to describe each set.

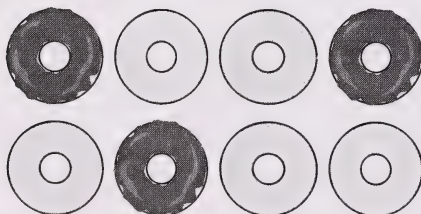
a. What fraction of the candies have stripes? \_\_\_\_\_



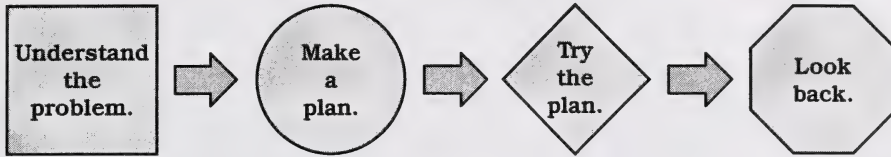
b. What fraction of cupcakes have sprinkles? \_\_\_\_\_



c. What fraction of the doughnuts have chocolate icing? \_\_\_\_\_



12. There were a dozen buns on the bakery shelf. Of them,  $\frac{4}{12}$  were cinnamon buns,  $\frac{1}{12}$  were raisin buns, and  $\frac{2}{12}$  were whole-wheat buns. The rest were crusty buns. How many were crusty?

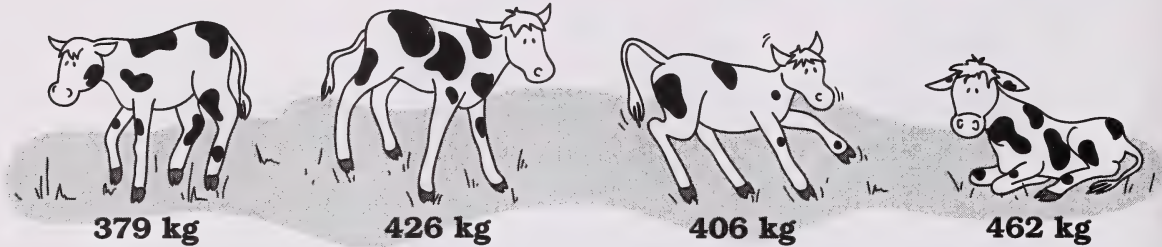


Show your work. Write your answer in a sentence.

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Fill in the circle that shows the correct answer to each of the following questions.

13. Sarah's dad weighed 4 calves that he wanted to sell.



Which of the following shows the calves in order from greatest weight to least weight?

- |                              |                              |                              |                              |
|------------------------------|------------------------------|------------------------------|------------------------------|
| <input type="radio"/> 379 kg | <input type="radio"/> 406 kg | <input type="radio"/> 426 kg | <input type="radio"/> 462 kg |
| <input type="radio"/> 406 kg | <input type="radio"/> 426 kg | <input type="radio"/> 462 kg | <input type="radio"/> 379 kg |
| <input type="radio"/> 462 kg | <input type="radio"/> 426 kg | <input type="radio"/> 406 kg | <input type="radio"/> 379 kg |
| <input type="radio"/> 462 kg | <input type="radio"/> 406 kg | <input type="radio"/> 426 kg | <input type="radio"/> 379 kg |

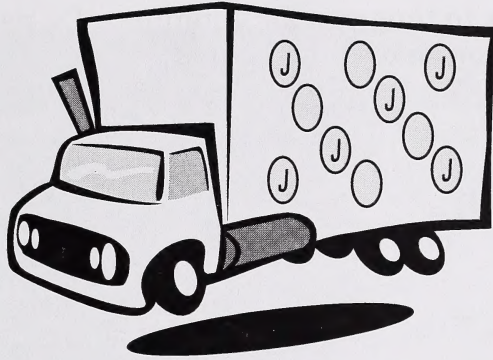
14. Sarah's dad wanted to hire someone to take the calves to the buyer. He phoned for prices. Which company is the best value?

Speedy Trucking	\$230
Heavy Haulers	\$218
Circle J. Trucks	\$203
Stock Movers	\$281

- ☐ Speedy Trucking for \$230
- ☐ Heavy Haulers for \$218
- ☐ Circle J. Trucks for \$203
- ☐ Stock Movers for \$281



15. This is the truck that picked up the calves.



Look at the circle designs on the truck. What fraction of the circles have a J in the middle?

- ☐  $\frac{3}{5}$
- ☐  $\frac{7}{10}$
- ☐  $\frac{1}{5}$
- ☐  $\frac{6}{10}$
16. Sarah wondered how much money they would get for the heaviest calf. Her dad said they would get about \$1 for each kilogram the calf weighed. Sarah rounded the weight to the nearest ten.

They should get about

- ☐ \$430
- ☐ \$460
- ☐ \$400
- ☐ \$470

**Timed exercise: 2 minutes**

Ask your home instructor to time you for 2 minutes. Do as many questions as you can in 2 minutes. Write how many you completed.

$7+7=$   $5+6=$   $8+4=$   $6+6=$

$9+5=$   $4+7=$   $8+6=$   $6+4=$

$3+9=$   $5+5=$   $6+9=$   $5+8=$

$$\begin{array}{r} 7 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 8 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ + 9 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ + 8 \\ \hline \end{array}$$

<b>Number completed</b>	
<b>Number correct</b>	



# STUDENT'S CHECKLIST

## MODULE 2: DAYS 1 TO 9

I know how to ...	Put a check mark beside the things you can do.
describe a three-digit number by telling how many hundreds, tens, and ones	
add two-digit and three-digit numbers ending in zero(s)	
round numbers to the nearest hundred	
use an organized list or a drawing to solve a problem	
read and write fractions	
describe a fraction as part of a whole or part of a set	

### STUDENT'S COMMENTS

Some things I learned in this module are \_\_\_\_\_

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Something I don't really understand yet is \_\_\_\_\_

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## HOME INSTRUCTOR'S CHECKLIST

Check **yes** or **not yet** for each question.

Can the student do the following?

- |  |                              |                                  |
|--|------------------------------|----------------------------------|
| • describe a three-digit number by telling how many hundreds, tens, and ones | <input type="checkbox"/> yes | <input type="checkbox"/> not yet |
| • describe a three-digit number using a number sentence                      | <input type="checkbox"/> yes | <input type="checkbox"/> not yet |
| • add two- and three-digit numbers ending in zero(s) mentally                | <input type="checkbox"/> yes | <input type="checkbox"/> not yet |
| • round numbers to the nearest hundred                                       | <input type="checkbox"/> yes | <input type="checkbox"/> not yet |
| • use an organized list to solve a problem                                   | <input type="checkbox"/> yes | <input type="checkbox"/> not yet |
| • use a diagram or picture to solve a problem                                | <input type="checkbox"/> yes | <input type="checkbox"/> not yet |
| • describe parts of a set using a fraction                                   | <input type="checkbox"/> yes | <input type="checkbox"/> not yet |
| • describe parts of a region (part of a whole) using a fraction              | <input type="checkbox"/> yes | <input type="checkbox"/> not yet |

## HOME INSTRUCTOR'S COMMENTS

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